

METHOD AND SYSTEM FOR A FRONT-END MODULAR TRANSMISSION  
CONTROL PROTOCOL (TCP) HANDOFF DESIGN IN A STREAMS BASED  
TRANSMISSION CONTROL PROTOCOL INTERNET PROTOCOL (TCP/IP)  
IMPLEMENTATION

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ABSTRACT OF THE INVENTION

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A method and system for handing-off TCP states in a  
communication network. Specifically, the present invention  
10 discloses allows for transferring TCP states between front-  
end node and a plurality of back-end web servers. The  
handoff occurs between dynamically loadable modules that  
wrap around the TCP/IP stack located at a front-end node and  
a selected back-end web server. A handoff protocol  
15 implemented by the loadable modules works within the kernel  
level of the existing TCP/IP code. As such, no changes to  
the existing TCP/IP code is necessary. The loadable modules  
at the front-end are able to select a back-end web server  
depending on the HTTP request, coordinate handing off TCP  
20 states, and forward packets to the back-end web server.  
Loadable modules at the selected back-end modify response  
packets going out to reflect the proper TCP state of the  
front-end node.

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